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| EXAMINER | | | | |
| QAZI, SABIHA NAIM | | | | |
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

10/518,669

Applicant(s)

WACHENDORFF-NEUMANN ET AL.

Examiner

Sabiha Qazi

Art Unit

1628

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 8/24/10.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 6-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 6-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 11/01/2010
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

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Non Final Office Action

Claims 6-20 are pending. Amendments are entered. No claim is allowed.

1. Continued Examination under 37 CFR 1.14
2. Double Patenting Rejections
3. 35 USC § 103(a) Rejections
4. Response, declaration and the data in Specification
5. Communication

Continued Examination Under 37 CFR 1.114

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 8/24/10 has been entered.

Double Patenting Rejection

1. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re*

Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

2. Claims 6-20 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 13-30 of copending Application No. 09/843,396. Although the conflicting claims are not identical, they are not patentably distinct from each other because **in copending application synergistic composition comprising** prothioconazole and tebuconazoles has been claimed.

3. Instant claims differ from the reference in that it contains additional component trifloxystrobin.
4. It would have been obvious to one skilled in the art to add trifloxystrobin in the mixture of prothioconazole and tebuconazole because prior art teaches that these compounds are excellent antifungal compounds. The term comprising allows additional components can be added.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 6-20 are rejected under 35 U.S.C. 103 (a) as being unpatentable over ISENRING et. al. (United States Patent 6,407,100), JAUTELAT et al. (US Patent 5,789,430) and the disclosure of the present Specification. These references teach the compounds trifloxystrobin, prothioconazole and tebuconazoles as antimicrobial agents, which embraces Applicant's claimed invention.

Claimed Invention

Claim 6 is drawn to a synergistic combination of trifloxystrobin, prothioconazole and tebuconazoles.

ISENRING teaches trifloxystrobin as fungicide. See the entire document especially lines 10-20 in column 1, lines 34-67 in column 6, abstract, and examples.

JAUTELAT teaches prothioconazole and tebuconazoles as microbicides. See the entire document especially example 1 in column 35, lines 27-64 in column 29, lines 1-55 in column 30 and Table 1 in column 14. Specification discloses that all the compounds used in the combination are known. See lines 1-18 on page 1. Applicant's specification discloses that all the compounds in claim 6 are known (page 1)

Instant claims differ from the reference in claiming the combination of all three known compounds useful as antimicrobial and antifungal agents.

It would have been obvious to one skilled in the art at the time of invention was made to combine the known compounds I, II and III for the same purpose in expectation to get a better activity when JAUTELAT teaches prothioconazole (II) and tebuconazoles (III) and ISENRING teaches trifloxystrobin (I). Since all the above cited reference teach the active compounds as claimed it is prima facie obvious to combine two or more compositions each of which is taught by the prior art to be useful for the same purpose in order to form a new composition that is to be used for the very same purpose; the idea of combining them flows logically

from their having been individually taught in the prior art. In re Kerkhoven, 205 USPQ 1069.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Claim Rejections - 35 USC § 103

2. Claims 6-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dutzmann et al (USPN 6306850). Dutzmann et al teach a synergistic fungicidal composition comprising tebuconazole and prothioconazole in a ratio of 1:1 (abstract, column 1 line 34 - column 2 line 24, columns 25 - 26). Dutzmann et al teach that to the composition can be added extenders, carriers (water), surfactants and other active compounds (column 13 line 13 - column 14 line 9). Dutzmann et al. teach a method of applying the composition to cereal plants (plant parts and seeds) for controlling cereal diseases (column 12 line 58- column 13 line 5).

Instant claims differ from the reference in claiming a narrow scope and is the selection of the prior art.

It would have been obvious to one having ordinary skill in the art to prepare a composition useful as fungicides at the time the invention was filed because the references teach all the compounds as excellent active compounds especially

useful for controlling the fungi. The invention is considered prima facie obvious to one skilled in the art. Further to determine the optimum amounts and ratios of ingredients. One would have been motivated to do this in order to develop an invention that would have most effective at controlling fungi growth while not destroying the plant.

It is important to note that the claims are not commensurate in scope with the showing on page 11 of the specification. Ample showing in the specification is not provided to convince an artisan that the broad ratio range and broad amount range of tebuconazole to/and prothioconazole to/and trioxystrobin are not sufficiently supported.

In the light of the forgoing discussion, the Examiner's ultimate legal conclusion is that the subject matter defined by the instant claims would have been obvious within the meaning of 35 U.S.C. 103(a).

Data in Specification

The results presented in the specification on page 11 are not considered synergistic rather it would have been obvious to one skilled in the art to combine the known active compounds in different ratios. The difference in synergistic efficacy 78 and compound of formula 1 (trifloxystrobin) efficacy 67 does not represent synergism. The data presented in Table A on page 11 of the specification is *Pyrenophora teres* test on barley (declaration includes two more examples). The synergism as claimed cannot be predicted for the effect on any

other phytopathogenic fungi. The Furthermore, the data does not commensurate with the scope of claims.

Response to Remarks, Declaration and the data in Specification

Applicants' response filed on 8/24/10 is hereby acknowledged. Applicant argues that the synergistic results are unexpected.

Examiner disagrees with the Applicant's arguments that the invention is not obvious over the cited references. On page 9 of the remarks Table A shows the test results. The amounts of the compounds used are very specific i.e. 10:8.5:10 for Examples (1)+(2)+(3).with application rate 35:30:35. The data presented in the specification and declaration does not commensurate with the scope of claims. The combination of known compounds would have been obvious to one skilled in the art at the time the invention was filed.

The data presented in the declaration filed by Dr. Peter Dahmen has been considered. In example 1 the calculated efficacy 67 and found 78 is not synergistic for Blumeria graminis. Example 2 appears to be marginal synergistic for Fusarium culmorum. It is clear from the data that the ratio of the three compounds as 1:1:1 does not necessarily will act as synergistic on all the species of fungi as claimed. The claimed subject matter is not limited to such a ratio and fungi. New claims 10 and 11 are drawn to specific concentrations. The combination of the

known compounds is considered obvious to one skilled in the art as the difference in efficacy of individual compound of formula I (67) and the mixture of three components (78) is not synergistic.

Examiner has considered the data presented in specification on page 11. The difference in synergistic efficacy 78 and compound of formula I efficacy 67 does not represent synergism. The data presented in Table A on page 11 of the specification is *Pyrenophora teres* test on barley (declaration includes two more examples). The application of the compounds (I), (II) and (III) are 100 g/ha and efficacy is 67, 56 and 22 percent respectively. The synergism as claimed cannot be predicted for the effect on any other phytopathogenic fungi and ratios of the components. Furthermore, because of each compound appears to be well known in the prior art, it would appear that the combination of the compounds would have been obvious in view of MPEP 2144.06 and See Ex parte Quadranti, 25 USPQ2d 1071 (Bd. Pat. App. & Inter. 1992).

The data presented in the specification and in the declaration does not commensurate to the scope of claimed subject matter and does not show any synergism.

Declaration Filed on August 22, 2007

The 1.132 declaration filed on 8/22/2007 was considered. First example in Table 1 on page 4 shows the combination of compound I, II and II at application rate 3.3 ppm, The mixture was tested for *Blumeria graminis*—Test (Wheat). The results as shown are found 75 and calculated 67. The difference of 8 is not considered synergistic. Example 2 as disclosed on Table 2 on page 5 shows the

combination of compounds I, II, III at the application rate 1:1:1. In this case calculated has not been shown. This mixture was tested against *Fusarium culmorum*—Test (Wheat). The results appear to be incomplete.

See Ex parte Quadranti where it was held that

“Use of materials in combination, each of which is known to function for intended purpose, is generally held to be *prima facie* obvious, and in instant case, use of combination of herbicides is so notoriously well known as to be capable of being taken by official notice; generalizations such as Colby formula are not particularly useful in determining whether synergism has been demonstrated, since formula inherently results in expectation of less than additive effect for combination of herbicides, since there is no evidence that such approach is considered valid by significant number of ordinarily skilled workers in relevant area of technology, and since it could be reasonably argued that in most cases, additive or better than additive results could be expected for combination of herbicides.”

“There is no single, appropriate test for determining whether synergism has been demonstrated for chemical combination; rather, facts shown in each case must be analyzed to determine whether chosen method has clearly and convincingly demonstrated existence of synergism or unobvious result”.

“Assuming *arguendo* that the differences in values presented are statistically significant, there is no evidence that they represent a true, practical advantage. In *re Freeman*, 474 F.2d 1318, 177 USPQ 139 (CCPA 1973); In *re Klosak*, 455 F.2d

1077, 173 USPQ 14 (CCPA 1972); *In re D'Ancicco*, 439 F.2d 1244, 169 USPQ 303 (CCPA 1971). Also, prescinding from the Colby formula test, which as we have already indicated is at best controversial and in our view probably invalid, there is no evidence that the differences are unexpected. *In re Merck*, 800 F.2d 1091, 231 USPQ 375 (Fed.Cir. 1986); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed.Cir. 1985); *In re Freeman*, *supra*" .

See 201 USPQ 193; *In re Kollman and Irwin*; U.S. Court of Customs and Patent Appeals No.78-624; Decided March 15; 595 F2d 48

In *KSR Int' l Co. v. Teleflex Inc.*, 550 U.S. 398, 415 (2007), the Supreme Court emphasized a "flexible approach" to the obviousness question, and reasoned that the analysis "need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ." *Id.* at 418; see also *id.* at 421 ("A person of ordinary skill is... a person of ordinary creativity, not an automaton.").

In view of these directives, the Supreme Court's decision in *KSR* implicitly endorses the principle, stated in *In re Kerkhoven*, 626 F.2d 846, 850 (CCPA 1980) (citations omitted), that:

It is *prima facie* obvious to combine two or more compositions each of which is taught by the prior art to be useful for the same purpose, in order to form a third composition which is to be used for the very same purpose [T]he idea of combining them flows logically from their having been individually taught in the prior art.

In *KSR*, the Court also recognized the well settled principle that evidence of

unexpected results may rebut an examiner's prima facie case of obviousness. KSR, 550 U.S. at 416 ("The fact that the elements worked together in an unexpected and fruitful manner supported the conclusion that Adams's design was not obvious to those skilled in the art."), (discussing *United States v. Adams*, 383 U.S. 39 (1966)). However, "[M]ere improvement in properties does not always suffice to show unexpected results [W]hen an applicant demonstrates substantially improved results., and states that the results were unexpected, this should suffice to establish unexpected results in the absence of evidence to the contrary." *In re Soni*, 54 F.3d 746, 751 (Fed. Cir. 1995). Moreover, "[s]ynergism, in and of itself, is not conclusive of unobviousness in that synergism might be expected." *In re Kollman*, 595 F.2d 48, 55 n.6 (CCPA 1979).

In summary Examiner believes that claims and specification does not provide any new concept or invention for the reasons cited above in view of the prior art cited above.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sabiha Qazi whose telephone number is (571) 272-0622. The examiner can normally be reached on any business day except Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fetterolf Brandon can be reached on (571) 272-2919. The

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fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Sabiha Qazi/
Primary Examiner, Art Unit 1628

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